



CLIMATE PROTECTION MEASURES

Implementation Progress Report

SUMMARY

On July 10, 2008 the City Council adopted implementation plans for seven new climate protection measures to reduce Chula Vista's greenhouse gas or "carbon" emissions. The measures were originally recommended by the City's Climate Change Working Group, which was comprised of residents, businesses and community representatives, and were vetted through over 25 public forums and meetings with stakeholder groups and municipal commissions before being approved by City Council. The new measures were designed to help meet the City's emissions reduction goal of 20% below 1990 levels by 2010 by lowering energy and water consumption, installing renewable energy systems, promoting alternative fuel vehicle use and designing pedestrian and transit-friendly communities.

As directed by City Council, staff has begun partial implementation of the seven measures over the last 6 months based on available funding and has also been pursuing a variety of funding sources to address the measures' full and sustained implementation. The following report outlines each measure's implementation status and upcoming milestones as well as progress in securing additional financing. Generally, most measures are meeting the milestones outlined in their original implementation plans. In addition, staff has identified a variety of feasible financing options to further pursue and finalize to ensure successful long-term implementation.

OVERALL PROGRAM ADMINISTRATION

Stakeholder Outreach

As the new climate protection measures are implemented, staff continues to actively update interested stakeholders through website revisions, local newspaper postings and public meetings. With assistance from the Communications Department, a bilingual outreach flyer (Appendix A) was produced and distributed in order to help explain the new climate-related programs and policies and encourage community support and participation. The City has also been contacted by other local governments and public agencies to inquire about Chula Vista's new climate protection measures and learn from its experience in climate change policy and greenhouse gas emissions reporting efforts.

Emissions Tracking & Reporting

Staff is currently compiling 2007 (calendar year) data to assess Chula Vista's emission levels for both municipal operations and the broader community. With this information, staff will be able to compare carbon emission values in 2007 with emission inventories from previous years. The City's *2005 Greenhouse Gas (GHG) Emissions Inventory* documented a 35% increase in citywide emissions compared to 1990 mainly due to residential sector growth. However, the City did make significant progress in reducing annual per capita

emissions by 17% between the two inventory years and avoiding nearly 200,000 tons of GHG emissions annually. In addition, GHG emissions from municipal sources decreased by 18% mainly due to energy-efficient traffic signal retrofits. Staff anticipates returning to City Council in March 2009 with a completed 2007 emissions inventory.

The City has worked with the California Air Resources Board, ICLEI and the California Climate Action Registry to formalize new greenhouse gas emissions reporting protocols specifically for local governments. These new protocols will enable Chula Vista to have greater accuracy and consistency in its emissions reporting and provide the scientific rigor necessary to comply with potential future regulatory standards. Staff anticipates utilizing these new reporting protocols for the City's 2008 emissions inventory.

MEASURE #1 – CLEAN VEHICLE REPLACEMENT POLICY FOR CITY FLEET

Overview

Measure #1 directs the City to require that 100% of the replacement vehicles purchased for the municipal fleet be high efficiency (hybrid) or alternative fuel vehicles (AFVs). However, factors such as the appropriateness for the vehicle task, fueling infrastructure, petroleum displacement, and the overall cost and environmental benefit must be considered prior to purchasing each replacement vehicle.

Status

Due to budget constraints, only five light-duty vehicles are being replaced this fiscal year, excluding police patrol sedans. Of the five vehicles being replaced, only one vehicle is capable of being replaced by a hybrid. This purchase will bring the total number of hybrids/AFVs in the City's fleet to 14.

The existing diesel-fueled vehicles in the City fleet will be converted to operate on biodiesel. This step can be implemented as soon as fuel storage tank capacity is addressed, since there is currently insufficient capacity available at the Public Works Corp Yard.

Next Steps

Staff has requested funding to install two 10,000-gallon fuel tanks at the Public Works Center as part of the City's Economic Stimulus Package submittal. If funding for this project is not approved, staff will seek CIP funding for FY2009/10.

MEASURE #2 – CLEAN VEHICLE REPLACEMENT FOR CITY-CONTRACTED FLEETS

Overview

Measure #2 directs staff to work with fleets under City authority to influence their expanded use of alternative fuels and high efficiency/alternative fuel vehicles (AFV) including electric, biodiesel, ethanol, hybrid, hydrogen and natural gas based on appropriateness for vehicle task, fueling infrastructure, petroleum displacement, overall cost and environmental benefit.

Status

Chula Vista Transit

In September of 2008, the San Diego Metropolitan Transit System Board approved the purchase of five (5) 40-foot Compressed Natural Gas (CNG) buses for the Chula Vista Transit fleet. These buses are scheduled to be delivered in March 2009. Chula Vista had originally requested six (6) buses, but due to higher than expected costs, only five (5) were purchased. The City's transit fleet of CNG buses will increase from 85% to 90% with the arrival of the new buses. The transit contractor, Veolia Transportation, has also replaced 3 gasoline supervisor vehicles with gasoline/electric hybrid vehicles. Veolia is committed to replacing a total of five gasoline vehicles with hybrids.

Due to long-term operational and maintenance issues, the Hydrogen Alternative Fuels Pilot Projects (Hydrogen van and Hydrogen/Natural Gas blend buses) were unfortunately cancelled. The current economic downturn has forced Public Works staff to focus its resources on core municipal services.

Street Sweeping

The current contract with Cannon-Pacific expires June 30, 2011. Language will be added to the Request for Proposals outlining the City's new policy for AFV/Hybrid vehicles.

Trash Hauler

New Leaf, a biodiesel company that is starting up in San Diego, is just weeks away from producing fuel from used cooking oil. As a result, full production and distribution of biodiesel to Allied Waste Services (AWS) is anticipated to start within the next couple of months. AWS is planning a full media campaign to announce their fleet's transition to the alternative fuel product and their new curbside cooking oil collection services which will provide the basic oil source to be refined.

Tow Trucks

The contract with the tow companies to provide police initiated tows expires June 30, 2011. Language will be added to the Request for Proposals outlining the City's new policy for AFV/Hybrid vehicles.

Next Steps

On January 15, 2009, Metropolitan Transit System approved Chula Vista Transit's request for two (2) 40-foot CNG buses. These buses will replace two (2) existing 1995 diesel buses and would increase the transit fleet's AFV count to 95%.

MEASURE #3 – BUSINESS ENERGY ASSESSMENTS

Overview

The measure, as adopted by City Council, would encourage through a new municipal ordinance commercial and industrial businesses to participate in an energy assessment of their premises. The measure is intended to help businesses identify energy efficiency opportunities at their facilities and, if desired, take advantage of applicable rebate and incentive programs for energy efficiency improvements. The assessments, which would be offered at no cost, would only apply to businesses with a physical storefront and/or office

and would be encouraged when a new license is issued or every three years for a renewed business license.

Status

In October 2008, City Council passed a new ordinance encouraging no-cost, voluntary energy assessments for commercial and industrial businesses. The energy assessments, which typically include an on-site review of a building's systems (i.e. lighting, cooling and heating), envelope (i.e. exterior windows, doors and insulation), office equipment, appliances, operational procedures and energy bills, will assist the businesses in lowering their monthly utility costs and consequently their contribution to greenhouse gas emissions and climate change impacts. The assessments also include a review of water conservation, alternative transportation and other practices which the participating business could implement and/or promote to its employees and customers.

In order to streamline and improve its cost effectiveness, the voluntary energy assessment program was integrated into the City's business licensing process. Specifically, all business license application and renewal forms were updated and the City's Permits Plus tracking software was modified to incorporate the energy assessment program. Approximately 4,500 businesses which qualify for the free assessment (i.e. occupies a storefront or office) received a program flyer with their business license application or renewal form in December 2008 and the Department of Conservation & Environmental Services has already begun receiving inquiries from businesses who wish to enroll in the free assessment program. The business assessment program is currently funded through the City's Local Government Partnership with San Diego Gas & Electric (see Financing Options for more details).

Next Steps

The Department of Conservation & Environmental Services will be tracking the number of businesses who elect to participate in the voluntary program and the resulting energy saving opportunities identified through the completed assessments. Staff is also working with the multi-department CLEAN campaign and the Chula Vista Chamber of Commerce to launch a "Green Business" recognition program to further promote participation in the free energy assessments.

MEASURE #4 – GREEN BUILDING STANDARD

Overview

As adopted, Measure #4 would mandate new and retrofit residential and non-residential projects to incorporate the requirements of the Housing and Community Development's (HCD) version of the California Green Building Standards Code (CGBSC), and to achieve carbon savings equivalent to exceeding current Title 24 by at least 15%. In addition, Council approved an in-lieu fee option where builders could pay a fee that equates to the cost of providing the required additional carbon savings which the City would then use to incentivize energy efficiency upgrades to older, existing homes.

Status

Green Building Standards

Measure #4's implementation plan includes the early adoption of HCD's green building standards with the exception of indoor water conservation measures. Staff excluded the indoor water conservation measures due to the fact that the State delayed the effective date of compliance to July 1, 2011 to allow manufacturers to increase the supply of low-flow products to meet demand. Staff researched the availability of the products and concluded that they are readily available now and since Chula Vista will be adopting the CGBSC before it takes effect throughout the State, the demand for the products in Chula Vista should have little impact on the overall supply. Furthermore, our region continues to deal with water shortage problems and it is prudent to expeditiously implement conservation measures that will help alleviate the situation. Therefore, staff will be proposing to include HCD's indoor water conservation measures in the City's new green building standards. Staff is planning on bringing the new green building and energy efficiency ordinances to Council in April 2009.

Carbon Savings Benchmark

Establishing a carbon savings benchmark as a means of compliance is an innovative concept and a new approach to energy efficiency. However, as staff worked on the details of the program, staff realized that it is ahead of its time and concluded that it will result in a program that is more complex than it needs to be. Furthermore, when staff first proposed this approach, it was staff's understanding, based on the opinion of our consultant, that requiring the carbon savings equivalent to exceeding Title 24 by 15% would not require the California Energy Commission's (CEC) review and approval and that existing CEC approved software can be used by builders, with minimum modifications and the use of simple conversion factors, to demonstrate compliance. It turned out that CEC approval is required and verifying compliance is more complex and time consuming for both the builder and the City than what staff anticipated.

Knowing that the CEC will have to review and approve the carbon reduction benchmark program, staff forwarded copies of the draft ordinance, implementation plan and the Carbon Reduction Checklist to the CEC for their feedback. The following are the main issues raised by the CEC:

1. In order for the City to adopt and enforce standards that exceed the State's minimum standards, the City must receive approval from the CEC. CEC approval is based on the City's ability to demonstrate that the proposed standards are cost effective. This cost effectiveness analysis is performed by using CEC approved software to compare life cycle costs with the estimated cost savings to be achieved by complying with the proposed standards. The determination that the standards are cost effective must be adopted by City Council prior to filing with the CEC. The CEC review and approval process can take up to 3 months.
2. Existing local standards will only be in effect until July 31, 2009, the day before the 2008 Building Energy Standards take effect. In order for the City to adopt and enforce local standards above the 2008 Standards, the City will have to file with the CEC as outlined in Item 1 above and the analysis will have to be based on the 2008 Standards.

3. The carbon emission reduction approach is new and therefore unfamiliar to the CEC. They typically see local ordinances that simply require a specific percentage above minimum State Standards.
4. The CEC also expressed concerns about the Prescriptive and On-site Renewable Energy compliance options proposed by the City. The CEC's concern with the Prescriptive Option, features with predetermined carbon savings, is that the carbon credits may be accurate for individual measures; however, randomly selecting prescriptive measures in order to accumulate the needed carbon credits may result in a reverse effect decreasing energy efficiency and therefore increasing carbon emissions. As for the On-site Renewable Energy Option, the concern is that it is inconsistent with the California Solar Initiative program which requires new construction to exceed current standards by at least 15% to receive incentives. Another concern is that it is rarely cost effective to install on-site generation without already having implemented other less expensive energy efficiency features.

For the purpose of simplifying the program, while at the same time achieving an equivalent level of carbon savings, staff will be proposing to only require projects demonstrate that they have exceeded Title 24 by a specific percentage. This compliance method is consistent with the structure, format and calculation methods of the California Energy Efficiency Standards and is simple and clear for the building industry to understand and staff to enforce.

Based on discussions with the Building Industry Association (BIA), BIA requested that we consider offering a compliance option that is based on equivalent carbon savings so that builders can use carbon savings realized from implementing sustainable community or site design measures toward meeting our standard. BIA indicated that such option would incentivize building sustainable communities. Staff is considering BIA's request and is looking into the details of such option.

To assist the City with the implementation, SDG&E hired an energy consultant to perform the CEC-required cost effectiveness analysis and to assist the City with developing the required ordinance and obtaining CEC approval. The consultant will be paid out of SDG&E Partnership funds that are currently available to the City. The analysis will also benefit SDG&E and the region in that it can be used by other local jurisdictions that fall within the same climate zones and are interested in adopting more stringent local standards. Staff anticipates the analysis to be available by the end of February 2009.

The determination of what is a reasonable percentage above the 2008 Energy Efficiency Standards (effective August 2009) will depend on the cost effectiveness analysis. The 2008 Standards are about 15% to 20% above current 2005 Standards, and for that reason, some of the jurisdictions that have adopted more stringent standards in the past, and a number of nationally recognized programs, are considering only requiring 10% to 15% above 2008 Standards for low-rise residential (single family dwellings and multi-residential less than three stories) and 10% for high-rise residential and non-residential. This would be an equivalent of 25% to 30% above current 2005 Standards.

As noted above, staff is planning on bringing the new green building and energy efficiency ordinances to City Council in April 2009.

Mitigation Fee Option

Staff is proposing to drop the mitigation fee option as a means of compliance. This was intended to allow an in-lieu fee that equates to the cost of exceeding Title 24 by 15%. This fee would have been deposited into a fund that would be used to incentivize energy efficiency upgrades to existing homes. Staff's proposal to drop the program is based on the following:

1. The administrative and inspection costs associated with an energy efficiency incentive/rebate program were determined to be excessive and not fully recoverable.
2. The availability of funds would be unpredictable but staff would still be responsible to accept applications and maintain a database of approved applications in anticipation of the availability of funds.
3. The Department continues to go through budget cuts to eliminate non-core programs and this mitigation fee option would be a new non-core program which is not cost recoverable.

It deserves mentioning that during the July 2008 Council workshop, the Environmental Health Coalition had concerns with this compliance option and preferred that all new construction meet the higher standards. Also, it is staff's expectation that new home builders would not utilize this option and would choose to invest the money in their projects by meeting the higher standards. This makes their homes more marketable and they can potentially recover the cost at time of sale.

Green Awareness Program

The Development Services Department recently published the "Sustainability Center" website. The site is a work-in-progress and will be regularly updated and maintained. The following are some of its contents:

1. Information regarding the City's commitment and advancement in sustainable development, the Climate Change Working Group Measures and the Council-adopted implementation plan for Measure # 4 (Green Building Standards).
2. Links to green building books and publications that are available at the Chula Vista Library, and links to other green building/sustainability resources.
3. Information on SDG&E, State and Federal incentives and rebates.
4. Information on the proper operations and maintenance of heating, cooling and ventilation systems in commercial buildings.

Staff is currently developing proper operations and maintenance information for homeowners. Future ordinances, policies and guidelines resulting from the implementation of the green building standards will be published on the site.

Furthermore, staff designated a "Sustainability Desk" workstation at our Development Services Counter to provide the public with information on sustainability, energy efficiency, recycling, SDG&E incentives and rebate programs and the California Center for Sustainable Energy's programs.

Policy Guidelines and Regulatory Amendments

This portion of the measure consists of the following three components related to updating existing and establishing new design and regulatory provisions to ensure incorporation of sustainable practices and features into new larger-scale development projects; the Community Sustainability Program, Zoning and Design Guidelines, and the current and proposed efforts of the Chula Vista Research Project (CVRP) through the National Energy Center for Sustainable Communities (NECSC) and San Diego State University (SDSU) regarding a Community Site Design Program.

Community Sustainability Programs –

Staff is currently updating the guidelines for preparation of Air Quality Improvement Programs (AQIP) required of new development projects involving more than 50 dwelling units. Present AQIP requirements are out-of-date with regard to our current minimum energy savings requirements for new development as discussed above, and with regard to available programs and options for compliance. A draft update will be completed for internal review in March 2009, and be refined and finalized parallel to the completion of the above noted cost effectiveness analysis of exceeding Title 24 standards. Staff will then forward the revised AQIP Guidelines for Council consideration in April 2009. The intent is to ensure that contemporary AQIP Guidelines are in place prior to the submittal of the next series of SPA Plans in eastern Chula Vista as part of the South Otay Ranch/University Villages planning efforts.

Zoning and Design Guidelines-

As noted in the implementation plan, development of zoning standards and design guidelines for energy efficient communities is awaiting an analysis of findings from the CVRP conducted by the NECSC and SDSU. As discussed in the item below, staff is currently reviewing the report in order to discern the cost/benefit of various options before preparing any standards and guidelines for consideration. Staff will need approximately 60 days to review and assemble initial zoning and design proposals for review and further direction by City Council. Staff currently anticipates returning to Council in May 2009 with initial proposals.

CVRP/NECSC Community Site Design Program-

The CVRP centers around the evaluation of more energy efficient community design and building options using the Eastern Urban Center and Otay Ranch Village 9 as pilot models. The initiative modeled the energy-efficiency and emissions performance of alternative building energy technologies and site design features for the two projects. Although the CVRP was not specifically designed to generate low-carbon site development standards and guidelines, the modeling results do provide a firm foundation upon which to frame follow-up research to produce them. City staff have recently received the CVRP draft final report for review. After reviewing the report, staff will form a Stakeholder Working Group to determine how the report's findings can be applied to the formulation of site development standards and guidelines. This work is currently envisioned to occur between March and June of 2009, with a proposal for consideration by the Planning Commission and City Council in the August-September 2009 timeframe.

In anticipation of release of the CVRP findings, and with the intent of pursuing follow-up research, staff additionally worked collaboratively with the NECSC and two eastern Chula Vista developers in preparation and submittal of an application to the CEC under one of their competitive research grant programs. The proposal included a second tier of building and infrastructure technology modeling and community design option evaluations in conjunction with the pending South Otay Ranch/University Villages project work. It also included a detailed scope-of-work and budget necessary to formulate the low-carbon site development standard and guidelines envisioned by CCWG Measure #4. Although the technical proposal received a high score in the competition, it missed being funded by one point (out of a thousand) in the final award process.

At the suggestion of the CEC, the NECSC is considering resubmission of the proposal under one of the next research program solicitations expected to be announced in March 2009. The NECSC is also considering seeking the needed research funds from private development companies interested in the formulation of such a standard. If these solicitation efforts are successful later this winter, the proposed work will support the efforts of the above noted Working Group in developing workable modeling tools and design features for inclusion in a local Community Site Design Program.

Next Steps

Staff is planning on bringing the green building and energy efficiency ordinances to Council in April, and shortly after, submit to the CEC and obtain approval by July 2009. As stated previously, the energy efficiency ordinance can only take effect after the CEC has reviewed and formally approved the proposed local standards. In addition, both ordinances would have to have been filed with the Building Standards Commission prior to taking effect. The planned effective date of the requirements is the beginning of August when the 2008 Energy Efficiency Standards take effect.

With regard to the Policy and Regulatory Amendments component, staff will bring updates to AQIP Guidelines to Council in April 2009, followed by a report on possible zoning standards and design guidelines in May 2009 based upon outcomes of the CVRP. The more comprehensive Community Site Design Program, also based on the CVRP results, will be presented in August-September 2009.

MEASURE #5 – SOLAR & ENERGY EFFICIENCY CONVERSION PROGRAM

Overview

The “Solar & Energy Efficiency Conversion” (SEEC) program is intended to facilitate widespread installation of renewable energy and energy efficiency upgrades by helping the average residential and commercial consumer overcome common institutional barriers, upfront capital costs and time constraints. The program’s primary components include (1) Identifying the energy and water upgrades that help reduce ratepayers monthly costs, (2) Executing a competitive bid process that identifies participating contractors and establishes maximum prices and minimum warranty and service standards, (3) Aggregating participants geographically to harness their collective purchasing authority and maximize the potential for installation efficiency and savings, (4) Establishing voluntary special assessment districts to provide participants with a financing option to fund their improvements, (5)

Linking local vocational job training in energy and water conservation with focused business recruitment and (6) Updating municipal codes to encourage renewable energy and conservation product installations and to remove institutional barriers.

Status

The Conservation and Environmental Services Department has taken the initial steps necessary to develop and implement a community energy retrofit program. Staff is currently working with Energy Engineers from the California Center for Sustainable Energy to outline the specific product specifications, installation costs, incentive amounts, energy reductions and monthly cost savings for various efficiency improvement (energy and water) options and solar energy installations. In September, the City hosted an “Industry Forum” for business community representatives, appliance retailers, energy efficiency contractors and solar installers to solicit input on program design to improve its cost effectiveness and to maximize local labor, manufacturing and retail sales opportunities. Additional feedback has also been garnered from representatives from local educational institutions in order to link vocational training and employment opportunities created by the program’s implementation.

The Building Division has modified Chula Vista’s existing “Solar Hot Water Pre-Plumbing” ordinance to better define the technical requirements and facilitate the future installation of the renewable energy systems on all residential units. Staff has also drafted, and Council has approved, a new “Pre-Wiring” ordinance to foster expansion of solar photovoltaic systems on residential buildings. Both ordinances will help reduce Chula Vista residents’ installation costs and streamline the permitting process for solar energy systems.

The City continues to improve its own facilities’ energy efficiency and expand its use of renewable energy technology. Over the past 2 years, Engineering staff with the assistance of the Conservation and Environmental Services Department have completed almost 30 retrofit projects at seven different buildings and installed a new solar hot water system at the Loma Verde Pool. In addition, newly constructed municipal buildings have been designed to exceed State energy standards by at least 20% and incorporate renewable energy such as the new Civic Center Building’s 30kW solar photovoltaic system.

Next Steps

City staff will continue to evaluate implementation options for a community solar and energy efficiency program. Specifically, staff will better refine the program’s process for selecting homeowners’ most cost effective energy improvements, maximizing their purchasing power through aggregation and “pre-qualifying” contractors and vendors to ensure high quality service. Staff will also determine the appropriate mechanisms for establishing voluntary assessment districts and for financing improvements through either private lenders or public bonds issuance (see Financing Options section for more details).

For municipal facilities, staff has already identified a number of additional energy improvement projects to potentially pursue over the next 3 years including inductive street lighting and integrated demand response processes. Also, staff is currently drafting a Request for Proposals for large-scale solar energy system deployment at City facilities to dramatically lower operational energy demand, monthly utility costs and carbon emissions.

MEASURE #6 – SMART GROWTH AROUND TROLLEY STATIONS

Overview

As approved by the City Council on July 10, 2008, the Implementation Plan for the Climate Change Working Group (CCWG) Measure #6, Smart Growth Around Trolley Stations, consisted of the following four components whose status is presented in the following section: Urban Core Specific Plan (UCSP) Implementation, H Street Corridor Study, Southwest Specific Plan(s) and other Related Regional Efforts. The combined intent of these efforts is to accomplish the remaining planning groundwork necessary to support realization of the smart growth development densities and intensities envisioned in both the General Plan and the UCSP for the areas surrounding the E St., H St. and Palomar St. trolley stations. Measure #6's specific actions and projects have already been approved by City Council or will return for formal Council review and approval when appropriate.

Status

Urban Core Specific Plan Implementation

This implementation plan component consists of two initiatives: the completion of a coordinated site development program for the area surrounding the E St. trolley station and the completion of a visual simulation model with SANDAG depicting what development intensification of the area would look like.

The visual simulation for redevelopment of E St. trolley station area was completed under the SANDAG grant in August 2008, and is available for viewing on both our City website and SANDAG's website. From a vantage point at the intersection of E St. and Woodlawn Ave. looking west, the simulation uses photo-realistic images to depict, in phases, what mixed use redevelopment and intensification of the area might look like. Pictorial representation of eventual trolley grade separation is also included.

Regarding the E St. TFA site development program, in order to ensure successful development of a high intensity Transit Focus Area (TFA), the program effort was to focus on the joint coordination and planning needed for a range of considerations including infrastructure, circulation, site design, building massing and parking. Having a coordinated assessment based on conceptual development for the larger superblock around E St., I-5, Woodlawn and F St., will enable the City to process and consider individual projects while ensuring a cohesive end result. Under an ENA (Exclusive Negotiation Agreement) with Galaxy Commercial Holding, LLC, originally approved in November 2007, City staff was working during 2008 with Galaxy's development team in reviewing a series of evolving development concepts for the City's old corporation yard site and the larger surrounding E St. TFA. A working session with the CVRC was held in August 2008 to provide an overview of the work, and a clear understanding of the development challenges for the site. Due to market and financial shifts, Galaxy had to abandon original plans focused around higher-rise residential development, in favor of attempts at a mid-rise rental residential focused development which also ultimately was not financially feasible. The ENA and planning efforts subsequently expired on November 8, 2008, despite an extension of the ENA and attempts to come up with a feasible development on the old corporation yard site.

At this time, Redevelopment Agency staff is in communication with the Metropolitan Transit System (MTS) regarding joint City and MTS participation in highest and best use

analysis for the properties. Planning and Redevelopment staff also submitted a proposal in February for funding assistance in support of these planning efforts under SANDAG's Smart Growth Improvements Program.

An insight gained through the work with Galaxy is that the minimum zoning requirements for the area under the current UCSP may exceed what is market-feasible for development, particularly in the near term. The minimum floor-area-ratios (FAR) of 4.0, and lot coverage of 60%, generally result in minimum 8 story buildings which are not currently market supportable. The ability to have a mix of building heights ranging from 3 to 8+ stories may be key in fostering development of the site in the nearer term. Staff will evaluate this as part of continued site development program efforts with MTS and others, and may suggest zoning amendments, if warranted.

H Street Corridor Study

This implementation plan component consists of three initiatives: the Urban Land Institute program, potential General Plan and/or UCSP amendments, and completion of a 3-D visual simulation model with SANDAG of what a redeveloped corridor might look like.

In July 2008, the Redevelopment Agency proposed sponsorship to provide \$120,000 in funding for an Urban Land Institute (ULI) panel that would bring planning and real estate experts to Chula Vista to conduct a five-day Advisory Services Program in October 2008. The Program uses a public charrette-type process to identify and address relevant issues/challenges, and provide an implementation strategy for the revitalization of the Corridor. Considering the amount of public questions surrounding the effort, the Chula Vista Redevelopment Corporation and City Council chose not to pursue the Program at this time, but left open the option to do so in the future.

Dependent upon the outcomes of the ULI (or other) study work, the second initiative was to pursue any General Plan and/or UCSP amendments necessary to implement study recommendations. This work will occur as needed at such time as a study is completed.

The third initiative to prepare a 3-D visual simulation of the Corridor is underway with SANDAG and their consultant per the approved grant. Although originally projected for completion in November/December 2008, staff agreed to a request by SANDAG to switch scheduling slots with another jurisdiction. Change in the schedule was not problematic considering the postponement of the above ULI work. Staff received a partial product in January for review, with the final simulation expected for completion in March 2009.

Southwest Specific Plan(s)

Development Planning staff is currently refining a work program to begin a series of Design Workshops for each of the five planning focus areas within the Southwest (as identified in the General Plan); Southwest Town Center/Third Avenue, Main St., Palomar Gateway, Broadway and West Fairfield. The workshops are the first step toward preparation of Specific Plans, and will be used to discuss and develop a localized vision plan for each of the areas, along with design principles and guidelines that will form a foundation for the subsequent Specific Plans. Considering budget circumstances, a decision was made in November 2008 to accomplish the work with internal staff rather than consulting services as

originally envisioned. The Redevelopment Agency has approved funding for the work in the current fiscal year 2008-2009.

Staff is designing the format and materials for the workshops, and preparing an initial needs assessment using the outputs from the Southwest United in Action Program. A series of Design Workshops for each of the focus areas are anticipated over the next six months. Using information from the workshops, staff will develop a work program for proceeding with detailed Specific Planning work in one or more of the focus areas depending upon issues, complexity and public input. Staff anticipates bringing that work program to the City Council by July 2009.

Other Related Regional Efforts

This implementation plan component consists of two initiatives: the I-5 Corridor Study with SANDAG and Caltrans and funding to accomplish grade separation of the trolley line at E and H Streets.

This Corridor Study is a prerequisite in the planning and design of future transportation improvements along the I-5 corridor necessary to ultimately serve development in western Chula Vista and the Bayfront. The improvements encompass highway travel lanes, HOV and transit, as well as reconfiguration of ramping, the bridge decks and grade separation of the trolley crossing at E and H Streets. Because considerations for one component affect the rest, the Corridor Study serves as a mechanism to review and address the interrelationships prior to proceeding with the next phases of design.

In November 2008, the City Council approved an MOU with SANDAG to conduct the Study. Necessary paperwork submitted by the City was processed and approved by Caltrans in December 2008, and the City received notification from Caltrans in early January 2009 of Federal Highway Administration authorization to proceed with the Study. Staff is currently finalizing the contract with SANDAG and their consultant, and expects that the Study will commence in late January. The Study will take approximately 24 months to complete (February 2011), and staff plans a series of periodic briefings as various milestones are reached.

Regarding trolley grade separation funding, the City received notice in October 2008 that it was not successful in its application for grant funding with the California Public Utilities Commission (CPUC). The primary reasons are that the funding gap exceeded the \$5 million/project maximum, the project did not have environmental clearances and the project could not be built by a 2012 horizon. The City's proposal was, however, the highest ranked project without environmental review. Staff will continue to work with SANDAG and others on grant funding, including continued participation in the CPUC's ongoing grant programs.

Next Steps

Staff will continue to implement Measure #6 by performing the following tasks over the next 6 months. The City will continue discussions with MTS regarding a joint-site planning effort for the E St. TFA properties, and should know by May 2009 if we were successful in obtaining the SANDAG grant for planning assistance funding for the E St. TFA efforts under the Smart Growth Incentives Grant Program. As part of those planning efforts, staff

will also evaluate whether any changes to UCSP zoning standards are warranted to promote development of the E St. TFA.

Staff will await any further direction from the City Manager regarding commencing the H Street Corridor Study. Staff will continue working with SANDAG and their consultant to complete the grant funded 3-D visual simulation for the H Street corridor by March 2009. With regard to Southwest Specific Planning, staff will conduct the five Southwest focus area Design Workshops beginning in February and completing in June 2009. Following the workshops, staff will present a work program to Council for a Southwest Specific Plan(s) by July 2009. Finally, a contract with SANDAG to commence the I-5 Corridor Study will be completed by late February 2009 and staff will continue to seek additional funding for the E and H Street trolley grade separations.

MEASURE #7 – TURF LAWN CONVERSION PROGRAM

Overview

Because water movement and treatment requires a large amount of energy and subsequently is a major contributor to greenhouse gas emissions, Measure #7 is intended to help residents and businesses replace turf lawn areas with drought-tolerant plants (commonly referred to as “xeriscape” or “WaterSmart” landscaping). Specifically, the program’s components include (1) continuation and expansion of the NatureScape program to promote water conserving and nature-friendly landscaping, (2) coupling of residential and business turf lawn replacement with the solar conversion aggregation block process (Measure #5), (3) converting select municipal facilities to low water use plantings and irrigation, and (4) updating various municipal landscape regulations and guidelines to comply with new state requirements and further promote outdoor water use efficiency.

Status

The Conservation and Environmental Services Department continues to implement its community-based NatureScape program which promotes nature-friendly landscaping by educating residents and businesses through free on-site assessments of their properties to evaluate wildlife-friendly and water-conserving features. City staff also educates participants about possible water-saving improvements and available incentives and rebates, if applicable. Properties which successfully meet the program’s requirements are certified through the National Wildlife Federation’s “Backyard Wildlife Habitat” program and receive an aluminum yard sign and certificate. To date, staff has performed over 100 on-site assessments for property owners through the program’s current limited funding source.

The City’s Engineering and Planning staff have begun to review the updated Model Landscape Ordinance which was recently released by the Department of Water Resources (DWR). The Model Landscape Ordinance outlines new statewide water-conserving landscape design criteria which local governments will be required to adopt by January 1, 2010. The ordinance would generally apply to landscaping for all new developments with total project landscape areas equal to or greater than 2,500 ft² and to re-landscaping of some existing properties (certain property types are exempt), and would base design thresholds on a maximum water allowance.

Both the community and municipal turf conversion programs aim to replace turf lawn areas with water-saving plants and irrigation systems. Besides reducing carbon emissions through reduced water consumption, the re-landscaped areas would help lower monthly utility costs and landscape maintenance costs. Currently, there is no available funding for either turf conversion program, so implementation has been limited.

Next Steps

City staff will continue, as funding permits, to enroll property owners in the Chula Vista NatureScape program and certify their yards and gardens through the National Wildlife Federation. Staff will also work over the next 6 months to update the City's existing landscape regulations and manuals to meet and potentially exceed the new statewide Model Landscape Ordinance. The updated regulations will strongly emphasize additional outdoor water savings by further minimizing turf lawn areas, using water-wise plant types and installing weather-based and low-water irrigation systems. Finally, a limited residential turf conversion program may be launched if federal or state grant funding becomes available.

IMPLEMENTATION FINANCING

The new measures' full implementation costs are estimated at \$1,286,380 and \$2,275,152 in one-time and annual costs, respectively (Table 1). In the Council-approved implementation plans, staff outlined various financing options to support full implementation of the new climate protection measures. Over the past 6 months, staff has pursued these options to better understand their feasibility and identify the necessary next steps.

SDG&E Local Government Partnership

Since 2006 Chula Vista and San Diego Gas & Electric (SDG&E) have been jointly implementing programs to reduce energy consumption at municipal facilities and in the community through their Local Government Partnership. The funding is provided through a "Public Goods Charge" which is a monthly utility bill surcharge on energy consumed by every customer in SDG&E's territory. As part of its 2009-2011 Energy Efficiency Program Portfolio (EEPP), San Diego Gas & Electric has included \$4.6 million (3-year total) to continue the Chula Vista/SDG&E Partnership. The EEPP is reviewed and ultimately approved by the California Public Utilities Commission which has notified SDG&E that there will be delays in approving the new EEPP. As a result, the new Chula Vista/SDG&E Partnership's funding will most likely be delayed until June 2009. In the meantime, SDG&E has committed to providing \$91,968 in monthly "bridge funding" to the City until the new funding is approved.

The 2009-2011 Chula Vista/SDG&E Partnership funds will provide support for staff time (salaries and benefits for 6 full-time and 7 part-time staff members) and program costs to continue partial implementation of Measures #3, 4 and 5. While the Partnership is providing critical current funding for these measures, there are restrictions on how the funds are used (such as no capital improvement expenditures) and there is no guarantee of future funding availability making long-term program implementation unreliable.

Table 1: Summary of Council-approved climate protection measures & their estimated implementation costs

CCWG MEASURE #	POLICY/PROGRAM	PROGRAM STRATEGY	ONE-TIME COSTS	ANNUAL COSTS
Admin.	Emissions Tracking & Reporting	Track progress in reducing carbon emissions through ICLEI and California Climate Action Registry program participation	-----	\$93,300
1	100% Clean Vehicle Replacement Policy for City Fleet	Replace vehicles through the purchase or lease of alternative fuel and hybrid vehicles	\$200,000	\$160,000
2	100% Clean Vehicle Replacement Policy for City-Contracted Fleet Services	Work with current and future vendors to include a "Clean Vehicle" replacement policy into the bid and contracting process	-----	-----
3	Business Energy Assessments	Through an ordinance addition, encourage businesses to participate in a no cost assessment as part of the business licensing process	-----	\$321,401
4	Green Building Standard	Through a building code revision, require new and renovated buildings to increase their energy efficiency and meet statewide green building standards	\$235,000	\$647,500
5	Solar & Energy Efficiency Conversion*	Provide a cost-effective, streamlined mechanism for property owners to implement solar and energy efficiency upgrades and create a municipal code requiring pre-wiring for solar electric systems	\$75,000	\$347,801
6	Smart Growth Around Trolley Stations**	Implement the 'smart growth' design principles outlined in municipal planning documents	\$620,000	-----
7	Outdoor Water Conservation***	Provide a cost effective, streamlined mechanism for installing water saving plants at private/public sites and create new municipal landscape regulations	\$156,380	\$705,150
TOTAL			\$1,286,380	\$2,275,152

* In addition to annual costs presented, implementation of measure #5 would require issuance of a public bond to cover upfront capital costs for solar and energy efficiency upgrades

** The City has already secured approximately \$2 million for related regional smart growth efforts such as the I-5 Corridor Study

*** Total annual costs for measure #7 include \$202,800 for NatureScape & Residential/Business Turf Conversions, \$300,000 for Municipal Facilities Turf Conversions and \$202,350 for Landscape Regulations Update & Implementation

Energy Franchise Fees

Currently, the City collects a franchise fee of 1.25% and 2.00% of citywide electricity and natural gas sales, respectively, regardless of energy provider. An increase of 1% in both electricity (adjusted rate = 2.25%) and natural gas (adjusted rate = 3.00%) fees would generate approximately \$2.2 million in additional revenue (Appendix B) and meet 98% of the ongoing funding needs for climate protection measures implementation. For reference, the City of San Diego's rate is currently set at 6.88% for electricity sales and 2.03% for natural gas sales. Because franchise fees are based on each individual ratepayer's consumption level, it also helps promote energy conservation in the community by rewarding ratepayers who consume less energy with lower fee amounts. Finally, the new

revenue generated will likely increase in the future as energy prices rise due to inflation and other market forces.

To increase the energy franchise fee, the City would need to renegotiate the terms of its 2005 Memorandum of Understanding with SDG&E. A renegotiated rate may also need to be vetted through a Proposition 218 review process and may be required to receive simple majority voter approval.

Local Fee Authority

A local fee authority has been granted in the past by the State legislature to enable local governments to fund environmental programs and services. For example, Chula Vista received fee authority under Assembly Bill 939 (Integrated Waste Management Act of 1989) to fund municipal solid waste, recycling and household hazardous waste programs eliminating their need for General Funds. A climate change-related local fee authority could be tied to energy, water and/or waste consumption levels and collected on the applicable monthly utility bills (see Appendix C for example legislative language). Similar to the energy franchise fee, a local fee authority would help foster conservation by rewarding residents and businesses who consume less resources (and have lower carbon emissions) with lower fee amounts.

The City has had preliminary discussions with staff members from various state representatives' offices to assess interest in supporting fee authority legislation. Generally, most state representatives' staff members were supportive of local greenhouse gas emissions reduction efforts and recognized the need for a reliable, long-term funding source. To further pursue this option, the City would have to work directly with Chula Vista's state representatives to draft the specific bill language and garner political support from other municipalities and state officials. Dependent on the legislation, a local fee authority may also need to be vetted through a Proposition 218 review process and may be required to receive voter approval.

Building Permit Fees

Development fees could be increased to cover the additional costs associated with implementing a citywide, mandatory green building standard (Measure #4). The extra costs are attributed to the need for enhanced staff training on energy efficiency, renewable energy and sustainable building technologies and for expanded permitting and inspection services.

Currently, the Finance Department is evaluating the necessary fee levels to fully fund the City's broader development-related services. As part of this study, the City will be able to specifically assess the additional costs from a mandatory green building program and revise the fee schedule, as needed. It should be noted that permit fees are directly linked to development levels and may not provide a consistent, long-term funding source for the program.

Bonds

A public bond issued by the City and secured through increased sales tax, transient occupancy tax and/or property taxes could quickly provide large, upfront capital improvement funds required to implement some of the seven measures. The bonds could have two specific applications: (1) provide capital funds for energy efficiency and solar

retrofits for residential and business facilities (Measure #5) and (2) provide funds for public purpose climate-related programs such as municipal renewable energy installations, alternative fuel fleet improvements and turf conversions. Under application #1, participating property owners would elect to be part of a special assessment district and their increased property fees would be applied to the bond's debt service. Under application #2, all Chula Vista property owners would vote in a general election whether to authorize a municipal bond issuance.

Over the past 6 months, City staff has further investigated the process and nuances of bond issuances for climate protection measures implementation. Staff has met with representatives from private financing institutions and consultant groups on how to structure public bonds to provide cost effective carbon-reducing programs, services and capital improvement projects.

Grants

City staff have been tracking and soliciting potential grant funding from a variety of government agencies. At the federal level, Chula Vista has submitted a comprehensive list of public improvement projects as part of the Economic Stimulus Package process. In addition to these potential projects being designed to incorporate "green" construction applications and reduce greenhouse gas emissions, some projects (such as the Public Works Yard's new biodiesel tanks) are directly related to the Council-approved climate measures implementation plans. Chula Vista may also be eligible to receive federal "Energy Efficiency & Conservation Block Grants" (EECBG) which were included in the recent Economic Stimulus Package. The EECBG would help the City support numerous climate-related programs such as financial incentives for energy efficiency improvements, building codes and inspection services to promote building energy efficiency and renewable energy installations on municipal facilities.

At the State level, there is potential funding for alternative fuel infrastructure as a result of Assembly Bill 118 (Alternative Fuels and Vehicle Technologies Program). The approved bill provides funding for fueling stations and vehicle fleet retrofits to help expand the deployment of alternative and renewable fueling technologies. AB118's specific regulations and funding criteria will be finalized by the California Energy Commission at their February 25, 2009 meeting. In addition, the City will continue to access the low interest loan program from the California Energy Commission to facilitate the installation of energy efficient and renewable energy technologies at municipal facilities. The loan program provides the capital needed for the energy technology improvements and the resulting energy cost savings are used to repay the debt service.

The federal and state grant opportunities outlined above could provide partial funding for Measures #1, 2, 3, 4 and 5. While these resources would help implement these measures, the funds would be most applicable for one-time costs and capital improvement expenditures due to their short-term nature.

APPENDIX A – Climate Measures Outreach Flyer (English Version)

The Climate, the Community and YOU.

The City of Chula Vista is committed to improving the community's environmental health by reducing the City's greenhouse gas emissions or "Carbon Footprint." These emissions are mainly caused by burning fossil fuels to power homes, offices and vehicles. Below are some of the ways that Chula Vista is working to lower its carbon emissions while helping to create less congested streets, cleaner air and reduced energy costs in the community.

Alternative Fuels

The City has begun replacing its older fleet vehicles with hybrid and alternative fuel vehicles. These new vehicles help reduce fuel costs and produce less air pollution. The City is also encouraging other fleet companies in the community to switch to cleaner vehicles.

Green Buildings

Chula Vista is the first community in San Diego County to require new buildings to incorporate "green" features which lower energy use, conserve water and create more healthy indoor spaces.

Transit and Walk-Friendly Communities

Chula Vista is dedicated to designing residential areas that encourage walking and are linked to public transportation, especially the E Street, H Street and Palomar Trolley Stations.

Solar Energy & Energy Efficiency

Business Energy Assessments

As part of the business license process, the City is offering free energy assessments to local businesses to help them identify opportunities to reduce monthly energy costs.

Solar & Energy Efficient Retrofits

Older homes and businesses in Chula Vista have the greatest potential to lower their energy use and to save on their monthly utility bills. The City is developing a new community program to provide easy, affordable ways to make energy efficiency improvements and to install solar energy systems.

Outdoor Water Conservation

In Chula Vista, household water is mostly used to irrigate outside lawn areas. The City is working on a new community program to help residents and businesses replace turf lawn areas with more water-friendly plants to lower monthly utility costs.

For more information, visit www.chulavistaca.gov/clean or call (619) 409-3893

Want to know
your carbon
footprint?


Calculate it at
www.chulavistaca.gov/clean

Get the tools
you need to
make smart
choices!


Before buying a new vehicle,
learn more about alternative
fuel, hybrid vehicles and
possible incentives at
www.driveclean.ca.gov

Find out about your past
energy use by using the free
Energy Waves tool at
www.sdge.com/residential/energywaves

Your Community.
Your Environment.
Your Choice.



Help keep
Chula Vista clean.



CITY OF
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APPENDIX C – Example Local Fee Authority Legislative Language (Adapted from Existing AB939 Code)

PUBLIC RESOURCES CODE SECTION XXX00-XXX04

XXX00. Each city and county shall demonstrate a funding source, or sources, available to pay for preparing, adopting, and implementing the Greenhouse Gas Inventory, Reduction and Adaptation element or plan as required by this part.

XXX01. A city, county, or city and county may impose fees in amounts sufficient to pay the costs of preparing, adopting, and implementing a countywide integrated Climate Change Plan ~~waste management plan~~ prepared pursuant to this division. The fees shall be based on the types or amounts of carbon equivalents ~~the solid waste~~, and shall be used to pay the actual costs incurred by the city or county in preparing, adopting, and implementing the plan, as well as in setting and collecting the local fees. In determining the amounts of the fees, a city or county shall include only those costs directly related to the preparation, adoption, and implementation of the plan and the setting and collection of the local fees. A city, county, or city and county shall impose the fees pursuant to Section ~~66016~~ of the Government Code.

XXX02. A local agency may directly collect the fees authorized by this chapter or may, by agreement, arrange for the fees to be collected by the agency ~~a solid waste hauler~~ providing energy, water, waste and/or sewage service ~~solid waste collection~~ for the city or county.

XXX03. A city or county may assess special fees of a reasonable amount on the importation of waste from outside of the county to publicly owned or privately owned facilities. No city or county shall export solid waste to any other jurisdiction unless the exporting city or county has, within one year following the date specified in Section 41791 or a later date established or permitted by the board, an approved city or county household hazardous waste element and a source reduction and recycling element which have both been implemented, or have submitted a countywide integrated waste management plan, and is in compliance with it, provided, however, that, until one year following the date specified in Section 41791 or a later date established by the board, nothing herein shall be construed as prohibiting the export of solid waste. The board may waive the requirements of this section if the board determines that all additional reasonable source reduction and recycling programs are being implemented in the city or county or if the board determines that the system to export waste supports or enhances the city or county source recovery and recycling element.